

WHAT IS CLAIMED IS:

1. An optical disk comprising:

having tracks in which a header region at which
positional information showing a recorded position is
5 recorded and a user region at which user information is
recorded are alternately arranged, and in which the
user region is made to wobble in a direction
perpendicular to the arranging direction; and

10 having a first region in which at least one of
a phase, a frequency, and an amplitude of the wobble is
different from the other portions is formed at
a portion a given length before the header region in
playback order within the user region.

15 2. An optical disk according to claim 1, wherein
the header region is formed such that positions of
headers are shifted along the arranging direction of
the tracks between the tracks which are adjacent to one
another.

20 3. An optical disk according to claim 2, wherein
the positional information has been recorded at the
header region by a pre-pit and the user information can
be recorded by marks due to changes of the phase at the
user region.

25 4. An optical disk according to claim 2, wherein
the user region is structured from groove tracks formed
from physical concave portions or convex portions, and
land tracks formed between the groove tracks which are

adjacent to one another.

5 5. An optical disk according to claim 2, wherein
a second region in which at least one of a phase,
a frequency, and an amplitude of the wobble is
different from the other portions except for the first
region is formed at a portion a given length before the
first region in playback order within the user region.

10 6. An optical disk according to claim 5, wherein
an interval between the first region and the second
region is set in accordance with a length in which the
positions of the headers at the header region are
shifted along the arranging direction of the tracks
between the tracks which are adjacent to one another.

15 7. An optical disk comprising:
having tracks in which a header region at which
positional information showing a recorded position is
recorded by a pre-pit and a user region at which user
information is recorded are alternately arranged, and
in which the user region is made to wobble in
20 a direction perpendicular to the arranging direction;
and

 having a region in which a phase of the wobble is
inverted to the other portions at a portion a given
length before the header region in playback order
25 within the user region.

 8. An optical disk apparatus comprising:
an optical disk which is structured such that

tracks are formed in which a header region at which
positional information showing a recorded position is
recorded and a user region at which user information is
recorded are alternately arranged, and in which
5 the user region is made to wobble in a direction
perpendicular to the arranging direction, and a first
region in which at least one of a phase, a frequency,
and an amplitude of the wobble is different from the
other portions is formed at a portion a given length
10 before the header region in playback order within the
user region;

a light detecting portion which is structured so
as to obtain an electrical signal corresponding to the
information recorded on the optical disk by condensing
15 a light beam on the optical disk via an objective lens;
and

a detecting portion which is structured so as to
detect the first region on the basis of the electrical
signal obtained at the light detecting portion.

20 9. An optical disk apparatus according to
claim 8, further comprising:

a control portion which is structured so as to
control the objective lens in a tracking direction by
a tracking error signal with respect to the objective
25 lens which is generated on the basis of the electrical
signal obtained at the light detecting portion; and

a holding portion which is structured so as to

hold the tracking error signal supplied to the control portion in accordance with the first region being detected by the detecting portion.

5 10. An optical disk apparatus according to claim 8, further comprising:

 a generating portion which is structured so as to generate a gate signal showing a playback timing of the header region in accordance with the first region being detected by the detecting portion, wherein

10 the information at the header region is played back from the electrical signal obtained at the light detecting portion on the basis of the gate signal generated at the generating portion.